HLLDTμL 9112

HIGH VOLTAGE HEX INVERTER

HIGH LEVEL LOGIC DIODE-TRANSISTOR MICROLOGIC® INTEGRATED CIRCUITS

A FAIRCHILD COMPATIBLE CURRENT SINKING LOGIC PRODUCT

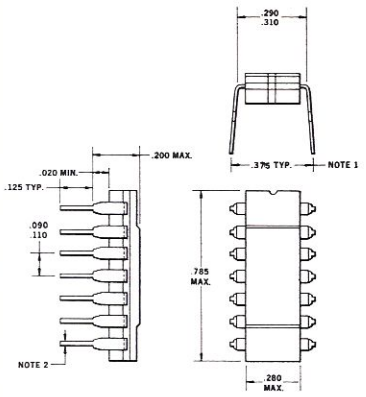
GENERAL DESCRIPTION

The HLLDTμL9112 is a CCSL to high level hex interface element, The 9112 consists of six gates suitable for converting from CCSL levels up to high logic levels (10V to 18V.) The 9112 is ideal for driving MOS devices such as the μM3700 element (6 Channel Multiplexer.)

The 9112 is available in ceramic Dual In-Line* Package.

TYPICAL DUAL IN-LINE PACKAGE

(In accordance with JEDEC TO–116)



NOTES:

1. Leads are intended for insertion in hole rows on .300" centers. They are purposely shipped with "positive" (.375) misalignment to facilitate insertion.
2. Board-drilling dimensions should equal your practice for a conventional .020 linch diameter lead.

ORDER PART NO. U6A911259X

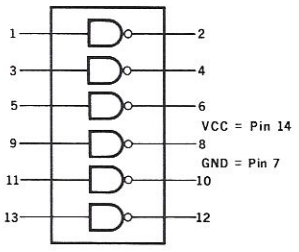
FEATURES

CCSL Compatibility
High Voltage Operation V_{CC} Range 12 to 20 V
F.O. = 10 HL
Wired-OR Capability
Good AC Noise Immunity

APPLICATIONS

CCSL→HL interface element
MOS driver

LOGIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Storage temperature	-65°C to 150°C
Operating temperature	0°C to 75°C
V_{CC}	25 V
Output Voltage	25 V
Output low current	40 mA

*Fairchild patent pending

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FAIRCHILD SEMICONDUCTOR
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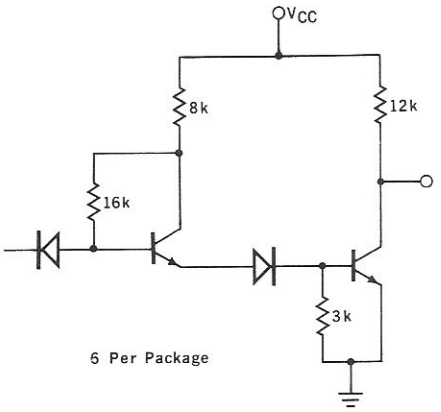
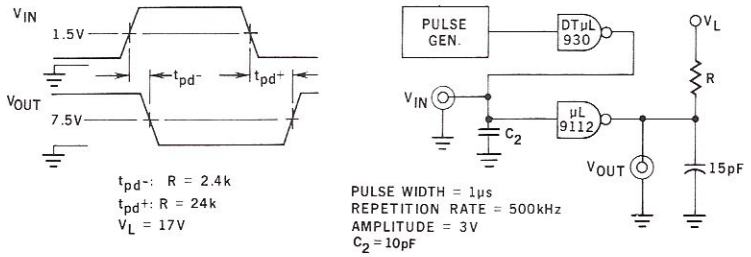


CIRCUIT DIAGRAM

ELECTRICAL CHARACTERISTICS

SYMBOL	LIMITS						UNITS	CONDITIONS AND COMMENTS
	0°C		25°C			75°C		
	MIN.	MAX.	MIN.	TYP.	MAX.	MIN. MAX.		
V_{OH} (Output High)			18	18.5			Volts	V_{CC} = 20 V, I_{OH} = 0.1 mA V_{IL} = Value indicated in this table.
V_{IL}					1.0	0.8	Volts	
I_{CEX} (Output Leakage)		75		0.2	75	75	μA	V_{CC} = 20 V, V_{OH} = 20. V V_{IN} = OV
V_{OL1} (Output Low)		0.5		0.25	0.5	0.5	Volts	V_{CC} = 12 V, I_{OL} = 10 mA V_{IH} = Value indicated in this table.
V_{IH}	2.1		2.0			0.8	Volts	
V_{OL2}		1.0		0.5	1.0	1.0	Volts	V_{CC} = 20 V, I_{OL} = 20 mA
I_F (Input Low)		-1.20		-0.8	-1.12	-1.12	mA	V_{CC} = 20 V, V_F = 0.45 V
I_{SC} (Output Shorted)		-2.4		-1.65	-2.3	-2.3	mA	V_{CC} = 20 V, V_{IN} = 0 V V_{OUT} = 0 V
I_{PDH} (Power Diss.)		36		22	34	34	mA	V_{CC} = 20 V, Input open
I_{PDL} (Power Diss.)		9.5		6.0	9.0	9.0	mA	V_{CC} = 25 V, Input GND V_{OUT} = 25 V
t_{pd}^+ (Turn Off)				145	400		ns	See switching time test circuit
t_{pd}^- (Turn On)				25	200		ns	



CIRCUIT AND WAVEFORMS FOR SWITCHING TESTS

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